

<110> LG CHEM, LTD.
 <120> Poly(3-hydroxyalkanoate) Block Copolymer Having Shape Memory Effect
 <130> LC05PCT042
 <150> KR 10-2005-0059907
 <151> 2005-07-04
 <160> 18
 <170> KopatentIn 1.71
 <210> 1
 <211> 18
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Choi3 (PCR Primer)
 <400> 1
 ccgccstgsa tcaagtac 18
 <210> 2
 <211> 20
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Choi4 (PCR Primer)
 <400> 2
 gytsgtgsyg tcyycgttcc 20
 <210> 3
 <211> 24
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> HJ-PHB-N (PCR Primer)
 <400> 3
 caccatgctg agttgcgctc tagc 24
 <210> 4
 <211> 27
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> HJ-PHB-C (PCR Primer)
 <400> 4

tcadmsytty acrtarcgkc ctggygc	2CF9214	27
<210> 5		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> SCL-1 (PCR Primer)		
<400> 5		
gatcgatacc aatctcaccg		20
<210> 6		
<211> 21		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> SCL-2 (PCR Primer)		
<400> 6		
caaagccagt ggttcgacgt a		21
<210> 7		
<211> 19		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> SCL-3 (PCR Primer)		
<400> 7		
ctgctgaaac tgttggagc		19
<210> 8		
<211> 47		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> SD-BA-N (PCR Primer)		
<400> 8		
gggggtacca ataaggagat atacatatgg gtactgcgag caatgcg		47
<210> 9		
<211> 28		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> BA-C (PCR Primer)		

2CF9214

<400> 9
cccactagtt cagcgctcga tggccagc 28

<210> 10
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> SD-phbC-N (PCR Primer)

<400> 10
gggcatatga cccagaagaa caacagcg 28

<210> 11
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<223> phbC-C (PCR Primer)

<400> 11
cccactagtt cadmscttya crtaacgtcc tggcgcygc 39

<210> 12
<211> 756
<212> DNA
<213> Pseudomonas sp. HJ-2

<220>
<221> variation
<222> (482)
<223> n=A, C, G or T

<400> 12
atgggtactg cgagcaatgc ggcacgtata gctctgggtca ccggtgggtat gggcggtatc 60
ggtacggcga tcagccagcg cctgcatcgg gatggcttca ccgtgggtggg gggctgtaat 120
ccctactcca gccgcaaggc ttcttggtatt gccacgcaac tcgaggcggg ctttcacttc 180
cactgcatcg actgcgacat caccgactgg gatagcacc gccaggcctt cgacatggtg 240
cacgagactg tcggcccgat cgatgtattg gtcaacaatg ccggcatcac ccgcgacggc 300
actttccgca agatgtcccc ggaaaactgg aaggcggtga tcgataccaa tctcaccggc 360
ctgttcaaca caaccaagca ggtcatcgag ggcatgctgg ccaagggctg gggacgcgtc 420
atcaacatct cctcaatcaa tggccagcga ggccagtctg ggcagaccaa ctactccgcg 480
gncaaggctg gcattcatgg cttcagcatg gccttggccc gcgagggtgag tggcaagggc 540
gtgaccgtca atacggtttc ccctggctac atcaagaccg acatgaccgc ggcgattcgc 600
ccggacatcc tcgaagacat gattactggc attcccgtgg gccgtctcgg ccagcccag 660

2CF9214

gagatcgctt cgatcgtggc ctggctggcc tccgatcagt ctgcctatgc caccggcgcc 720
gacttctcgg tgaatggcgg catgaacatg cagtga 756

<210> 13
<211> 1179
<212> DNA
<213> Pseudomonas sp. HJ-2

<220>
<221> variation
<222> (207)
<223> n=A, C, G or T

<220>
<221> variation
<222> (209)
<223> n=A, C, G or T

<400> 13
atgatcgaag tcgttatcgt cgccgccact cgcaccgcca tcggcgcttt ccaggggagc 60
ctggccggca ctcccgccgt tgaactgggc gccacggtga tccgccgcct gctcgaacag 120
accgctctgg atagcagtca ggtggatgaa gtgatactcg gccacgtact caccgccggt 180
gctggcagaa taccgctcgc caggcancng gtcacgcgcg gcctgccaca cgccgtaccg 240
gcgatgaccc tgaacaaggt ctgtggctcc ggcctgaaag ccctgcacct gggcgcccag 300
gccatccgct gtggcgatgc cgaggtgggtg attgccggtg gcatggagaa catgagcctg 360
tcgtcctatg tcctgccccaa ggcccgccacc ggcctgcgca tggggccacgc gcagctggtc 420
gacagcatga tcgtcgacgg cctgtgggac gccttcaacg actaccacat ggggatcact 480
gccgagaacc tggtagacaa gtacggcatc agccgcgaag cccaggacga attcgccgcc 540
gcctcgcagc agaaagccgt ggccgccatc gagaccggtc gcttccgcga cgagatcgtc 600
ccggtgagca ttccgcagcg caagggcgag gcgctgagct tcgacaccga cgaacagcca 660
cgcgccggca ccaccgccga gtcgctgggc aagctgaaac cggccttcaa gaacgacggc 720
agcgttactg ccggcaacgc ttccagtctc aacgacggcg ccgccgcggt actgctgatg 780
agtgcggcaa aggccgcagc gcttggctctg ccagtgctgg cgaagatcgc cgcctacgcc 840
aatgccggcg tcgacccggc gatcatgggt atcggaccgg tgtcgggccac ccgcagttgc 900
ctggagaagg cgggctggag tctggcagag ctggatctga tcgaggccaa tgaagccttc 960
gcggcccagg ccctggccgt gggtcaggag ctgggctggg atgctggcag ggttaacgtc 1020
aacggcgggc ccacgcacct cggccacccc attggcgctt ccggctgccg cgtactggtc 1080
agcctgctgc atgaaatgct caggcgcgac gcgaaaaaag gcctcgctac cctgtgtatc 1140
ggcggcgggc agggcgctggc gctggccatc gagcgctga 1179

2CF9214

<210> 14
 <211> 1701
 <212> DNA
 <213> Pseudomonas sp. HJ-2 (SCL-PHA synthase (phaC))

<400> 14
 atggacaacg gacacacctt tgctcactac tggtcgggtc aggcgccctt catcgccagc 60
 ttcgtcctgc agcaactgcg cttatacgtg gcgcaaaata cttggttcag cgggcacgac 120
 caaagccagt ggttcgacgt acctgtcgag gcggttgagc aactgcaggc ggactaccaa 180
 caacagtggg ccgaacttgg ccagcaattg ctgagctgcc agccgttcgc attcagcgat 240
 cgtcgcttcg ccagtggcaa ctggagcgaa ccgctgttcg gttccctggc tgccttctac 300
 ctgctgaatt ccggtttcct gctgaaactg ttggagcttc tccccatcga tgagcagaag 360
 ccccgccagc gcttgcggtta cttgatcgag caagcgattg ccgcaagcgc cccaagtaac 420
 tttctgctga gcaaccctga tgccctgcaa cgcctagtgg aaaccaggc cgccagccta 480
 ctaagtggcc tgttgcatct tgccagtgc ctgcaggcag gcaagtgcg ccaatgtgac 540
 ttgggcgatt tcgaagtcgg cgtgaatctg gccaccacc ctggtgccgt ggtactggaa 600
 acccctctgt tccagctgat ccagtattcg ccgctcagcg aaacgcaata ccagcggccg 660
 atattcatgg tcccgcctg gatcaacaag tactacatcc ttgacctcg gcccgaac 720
 tctctaatac gtcactact ggagcgaggc catcaagttt ttctgatgtc ctggcgcaac 780
 ttcactcagg aacaggccga catcacctgg gagcagatca tccaggacgg agtgatcagc 840
 gccctgcgca ctacccggc catcagtggg gagcgccacc tgaactgtt gggtttctgc 900
 atcggcgga ccatgctgag ttgcgtcta gcggtgctgg cagcgctgg cgaccaggac 960
 attgccagcc tgagtctatt cgccactttt cttgactacc ttgataccgg gccgatcagc 1020
 gtcttcgtcg atgagcaact ggtggcctac cgtgagcgca ccatcggtgg ccatggtggc 1080
 aaatgtggcc tgttccgagg tgaggacatg ggcaatacct tctccctgct gcggcccaac 1140
 gagctgtggt ggaactacaa cgtagacaaa tatctcaagg ggcagaagcc gctggctctg 1200
 ggtctactgt tctggaacaa cgacagcacc aatctgccgg ggcccctgta ttgctggtat 1260
 ctgcgccaca cctacctgca gaacgacctc aaatcggggg agttggatct gtgcggcgtc 1320
 aagttggatc tgcggggccat agacgcacca gcctacatct tgggaacca tgacgaccac 1380
 atcgtgccct ggcgaagcgc ctatgccagc acggaattgc tgggaggtcc aaagcgcttt 1440
 gtcctcggcg cctccggcca catcgccggg gtgatcaacc cgccagatag gaacaagcgc 1500
 cattactggg tcaatgaaca catagcgccg gtagctgacg actggctgca gggagctcag 1560
 cagcattccg gcagttggtg gggtgactgg ttgcctgggt tgaccggcta tgccggccca 1620
 cgcaagcctg ccatcactat gctgggcagt gccgagtacc cccgcttga acatgcgcca 1680

ggacgttatg tgaagctatg a

1701

<210> 15
 <211> 3933
 <212> DNA
 <213> Pseudomonas sp. HJ-2 (phb locus)

<400> 15
 gagctcaatg cgcgccagga ctggtgtgcg aggacaaccc ggcgtcacc ggggacattg 60
 ttcacatccg caaagcgcca gagacttgcc cgctgttcca aggtcttaat taacgaggaa 120
 tggttaatgg gtactgagag caatgcggca cgtatagctc tggtcaccgg tggatatggc 180
 ggtatcggtc cgcgcatcag ccagcgccctg catcgggatg gcttcaccgt ggtggtgggc 240
 tgtaatccct actccagccg caaggcttcc tggattgcca cgcaactcga ggcgggcttt 300
 cacttccact gcatcgactg cgacatcacc gactgggata gcaccgcca ggccttcgac 360
 atggtgcacg agactgtcgg cccgatcgat gtattggtca acaatgccgg catcaccgcg 420
 gacggcactt tccgcaagat gtccccgga aactggaagg cggatgatcga taccaatctc 480
 accggcctgt tcaacacaac caagcaggtc atcgagggca tgctggccaa gggctgggga 540
 cgcgatcatca acatctcctc aatcaatggc cagcgaggcc agttcgggca gaccaactac 600
 tccgcggnca aggctggcat tcatggcttc agcatggcct tggcccgcga ggtgagtggc 660
 aagggcgtga ccgtcaatac ggtttccctt ggctacatca agaccgacat gaccgcggcg 720
 attcgcccgg acatcctcga agacatgatt actggcattc ccgtgggccc tctcggccag 780
 cccgaggaga tcgcctcgat cgtggcctgg ctggcctccg atcagtctgc ctatgccacc 840
 ggcgccgact tctcggtgaa tggcggcatg aacatgcagt gatgcgcat tccgcgccctc 900
 gctcagccat gacatgaggt gttccagatg atcgaagtcg ttatcgtcgc cgccactcgc 960
 accgccatcg gcgctttcca ggggagcctg gccggcactc ccgccgttga actgggcgcc 1020
 acggtgatcc gccgcctgct cgaacagacc gctctggata gcagtcaggt ggatgaagtg 1080
 atactcggcc acgtactcac cgccgggtgtt ggcagaatac cgctcgccag gcancnggtc 1140
 atcgccggcc tgccacacgc cgtaccggcg atgaccctga acaaggctctg tggctccggc 1200
 ctgaaagccc tgcacctggg cgcccaggcc atccgctgtg gcgatgccga ggtggtgatt 1260
 gccggtggca tggagaacat gagcctgtcg tcctatgtcc tgcccaaggc ccgcaccggc 1320
 ctgcgcatgg gccacgcgca gctggtcgac agcatgatcg tcgacggcct gtgggacgcc 1380
 ttcaacgact accacatggg gatcactgcc gagaacctgg tagacaagta cggcatcagc 1440
 cgcgaaagccc aggacgaatt cgccgcccgc tcgcagcaga aagccgtggc cgccatcgag 1500
 accggtcgct tccgcgacga gatcgtcccg gtgagcattc cgcagcgcaa gggcgaggcg 1560
 ctgagcttcg acaccgacga acagccacgc gccggcacca ccgccgagtc gctgggcaag 1620

2CF9214

ctgaaaccgg	ccttcaagaa	cgacggcagc	gttactgccg	gcaacgcttc	cagtctcaac	1680
gacggcgccg	ccgcggtact	gctgatgagt	gcggaagagg	ccgcagcgct	tggtctgcc	1740
gtgctggcga	agatcgccgc	ctacgccaat	gccggcgctg	acccggcgat	catgggtatc	1800
ggaccggtgt	cggccacccg	cagttgcctg	gagaaggcgg	gctggagtct	ggcagagctg	1860
gatctgatcg	aggccaatga	agccttcgcg	gcccaggccc	tggccgtggg	tcaggagctg	1920
ggctgggatg	ctggcagggg	taacgtcaac	ggcggcgcca	tcgccctcgg	ccacccatt	1980
ggcgccctcc	gctgccgcgt	actggtcagc	ctgctgcatg	aaatgctcag	gcgcgacgcg	2040
aaaaaaggcc	tcgctaccct	gtgtatcggg	ggcggccagg	gcgtggcgct	ggccatcgag	2100
cgctgagtga	cgctttcgcg	actctgccgg	acgtgcccc	ctgcacccgc	accgccaggc	2160
tggccgtgcg	cttacgtctc	gacatgatcg	caccgcgggc	gcggcttttg	ttttcatatt	2220
cctggagacg	ccatggacaa	cggacacacc	tttgctcact	actggtcggg	tcaggcgccc	2280
ttcatcgcca	gcttcgtcct	gcagcaactg	cgcttatacg	tgccgcaaaa	tacttggttc	2340
agcgggcacg	accaaagcca	gtggttcgac	gtacctgtcg	aggcgttgga	gcaactgcag	2400
gcggactacc	aacaacagtg	ggccgaactt	ggccagcaat	tgctgagctg	ccagccgttc	2460
gcattcagcg	atcgtcgctt	cgccagtggc	aactggagcg	aaccgctgtt	cggttccctg	2520
gctgccttct	acctgctgaa	ttccggtttc	ctgctgaaac	tggttgagct	tctccccatc	2580
gatgagcaga	agccccgcca	gcgcttgcg	tacttgatcg	agcaagcgat	tgccgcaagc	2640
gccccaahta	actttctgct	gagcaaccct	gatgccctgc	aacgcctagt	ggaaaccag	2700
ggcgccagcc	tactaagtgg	cctggttgc	cttgccagt	acctgcaggc	aggcaagttg	2760
cgccaatgtg	acttgggcga	tttcgaagtc	ggcgtgaatc	tgccaccac	ccctggtgcc	2820
gtggtactgg	aaaccctct	gttcagctg	atccagtatt	cgccgctcag	cgaaacgcaa	2880
taccagcgcc	cgatattcat	ggtcccgccc	tggtatcaaca	agtactacat	ccttgacctc	2940
gggcccga	actctcta	ccgtcatcta	ctggagcgag	gccatcaagt	ttttctgatg	3000
tcctggcgca	acttcactca	ggaacaggcc	gacatcacct	gggagcagat	catccaggac	3060
ggagtgatca	gcgcctcg	cactacccgg	gccatcagt	gtgagcgcca	cctgaactgt	3120
ttgggtttct	gcatcgcg	caccatgctg	agttgcgctc	tagcgggtg	ggcagcgct	3180
ggcgaccagg	acattgccag	cctgagtcta	ttcgccactt	ttcttgacta	ccttgatacc	3240
gggccgatca	gcgtcttcgt	cgatgagcaa	ctggtggcct	accgtgagcg	caccatcggt	3300
ggccatggtg	gcaaagtgtg	cctgttccgc	ggtgaggaca	tggaataac	cttctccctg	3360
ctgcggccca	acgagctgtg	gtggaactac	aacgtagaca	aatatctcaa	ggggcagaag	3420
ccgctggctc	tggttctact	gttctggaac	aacgacagca	ccaatctgcc	ggggccctg	3480
tattgctggt	atctgcgcca	cacctacctg	cagaacgacc	tcaaatcggg	ggagttggat	3540

2CF9214

ctgtgcggcg tcaagttgga tctgcgggcc atagacgcac cagcctacat cttgggaacc 3600
catgacgacc acatcgtgcc ctggcgaagc gcctatgcca gcacggaatt gctgggaggt 3660
ccaaagcgct ttgtcctcgg cgctccggc cacatcgccg gggtagatcaa cccgccagat 3720
aggaacaagc gccattactg ggtcaatgaa cacatagcgc cggtagctga cgactggctg 3780
cagggagctc agcagcattc cggcagttgg tggggtgact ggttcgcctg gttgaccggc 3840
tatgccggcc cagcaagcc tgccatcact atgctgggca gtgccgagta ccccccgtt 3900
gaacatgcgc caggacgtta tgtgaagcta tga 3933

<210> 16
<211> 251
<212> PRT
<213> Pseudomonas sp. HJ-2 (NADPH-dependent acetoacetyl-CoA reductase (phbB))

<400> 16
Met Gly Thr Ala Ser Asn Ala Ala Arg Ile Ala Leu Val Thr Gly Gly
1 5 10 15
Met Gly Gly Ile Gly Thr Ala Ile Ser Gln Arg Leu His Arg Asp Gly
20 25 30
Phe Thr Val Val Val Gly Cys Asn Pro Tyr Ser Ser Arg Lys Ala Ser
35 40 45
Trp Ile Ala Thr Gln Leu Glu Ala Gly Phe His Phe His Cys Ile Asp
50 55 60
Cys Asp Ile Thr Asp Trp Asp Ser Thr Arg Gln Ala Phe Asp Met Val
65 70 75 80
His Glu Thr Val Gly Pro Ile Asp Val Leu Val Asn Asn Ala Gly Ile
85 90 95
Thr Arg Asp Gly Thr Phe Arg Lys Met Ser Pro Glu Asn Trp Lys Ala
100 105 110
Val Ile Asp Thr Asn Leu Thr Gly Leu Phe Asn Thr Thr Lys Gln Val
115 120 125
Ile Glu Gly Met Leu Ala Lys Gly Trp Gly Arg Val Ile Asn Ile Ser
130 135 140
Ser Ile Asn Gly Gln Arg Gly Gln Phe Gly Gln Thr Asn Tyr Ser Ala
145 150 155 160
Xaa Lys Ala Gly Ile His Gly Phe Ser Met Ala Leu Ala Arg Glu Val
165 170 175
Ser Gly Lys Gly Val Thr Val Asn Thr Val Ser Pro Gly Tyr Ile Lys
180 185 190
Thr Asp Met Thr Ala Ala Ile Arg Pro Asp Ile Leu Glu Asp Met Ile
195 200 205
Thr Gly Ile Pro Val Gly Arg Leu Gly Gln Pro Glu Glu Ile Ala Ser
210 215 220

2CF9214

Ile Val Ala Trp Leu Ala Ser Asp Gln Ser Ala Tyr Ala Thr Gly Ala
225 230 235 240

Asp Phe Ser Val Asn Gly Gly Met Asn Met Gln
245 250

<210> 17
<211> 392
<212> PRT
<213> Pseudomonas sp. HJ-2 (beta-ketothiolase (phbA))

<400> 17
Met Ile Glu Val Val Ile Val Ala Ala Thr Arg Thr Ala Ile Gly Ala
1 5 10 15

Phe Gln Gly Ser Leu Ala Gly Thr Pro Ala Val Glu Leu Gly Ala Thr
20 25 30

Val Ile Arg Arg Leu Leu Glu Gln Thr Ala Leu Asp Ser Ser Gln Val
35 40 45

Asp Glu Val Ile Leu Gly His Val Leu Thr Ala Gly Ala Gly Arg Ile
50 55 60

Pro Leu Ala Arg Xaa Xaa Val Ile Ala Gly Leu Pro His Ala Val Pro
65 70 75 80

Ala Met Thr Leu Asn Lys Val Cys Gly Ser Gly Leu Lys Ala Leu His
85 90 95

Leu Gly Ala Gln Ala Ile Arg Cys Gly Asp Ala Glu Val Val Ile Ala
100 105 110

Gly Gly Met Glu Asn Met Ser Leu Ser Ser Tyr Val Leu Pro Lys Ala
115 120 125

Arg Thr Gly Leu Arg Met Gly His Ala Gln Leu Val Asp Ser Met Ile
130 135 140

Val Asp Gly Leu Trp Asp Ala Phe Asn Asp Tyr His Met Gly Ile Thr
145 150 155 160

Ala Glu Asn Leu Val Asp Lys Tyr Gly Ile Ser Arg Glu Ala Gln Asp
165 170 175

Glu Phe Ala Ala Ser Gln Gln Lys Ala Val Ala Ala Ile Glu Thr
180 185 190

Gly Arg Phe Arg Asp Glu Ile Val Pro Val Ser Ile Pro Gln Arg Lys
195 200 205

Gly Glu Ala Leu Ser Phe Asp Thr Asp Glu Gln Pro Arg Ala Gly Thr
210 215 220

Thr Ala Glu Ser Leu Gly Lys Leu Lys Pro Ala Phe Lys Asn Asp Gly
225 230 235 240

Ser Val Thr Ala Gly Asn Ala Ser Ser Leu Asn Asp Gly Ala Ala Ala
245 250 255

Val Leu Leu Met Ser Ala Ala Lys Ala Ala Ala Leu Gly Leu Pro Val
Page 9

2CF9214

260 265 270
 Leu Ala Lys Ile Ala Ala Tyr Ala Asn Ala Gly Val Asp Pro Ala Ile
 275 280 285
 Met Gly Ile Gly Pro Val Ser Ala Thr Arg Ser Cys Leu Glu Lys Ala
 290 295 300
 Gly Trp Ser Leu Ala Glu Leu Asp Leu Ile Glu Ala Asn Glu Ala Phe
 305 310 315 320
 Ala Ala Gln Ala Leu Ala Val Gly Gln Glu Leu Gly Trp Asp Ala Gly
 325 330 335
 Arg Val Asn Val Asn Gly Gly Ala Ile Ala Leu Gly His Pro Ile Gly
 340 345 350
 Ala Ser Gly Cys Arg Val Leu Val Ser Leu Leu His Glu Met Leu Arg
 355 360 365
 Arg Asp Ala Lys Lys Gly Leu Ala Thr Leu Cys Ile Gly Gly Gly Gln
 370 375 380
 Gly Val Ala Leu Ala Ile Glu Arg
 385 390

<210> 18
 <211> 566
 <212> PRT
 <213> Pseudomonas sp. HJ-2 (SCL-PHA synthase (phaC))

<400> 18
 Met Asp Asn Gly His Thr Phe Ala His Tyr Trp Ser Gly Gln Ala Pro
 1 5 10 15
 Phe Ile Ala Ser Phe Val Leu Gln Gln Leu Arg Leu Tyr Val Ala Gln
 20 25 30
 Asn Thr Trp Phe Ser Gly His Asp Gln Ser Gln Trp Phe Asp Val Pro
 35 40 45
 Val Glu Ala Leu Glu Gln Leu Gln Ala Asp Tyr Gln Gln Gln Trp Ala
 50 55 60
 Glu Leu Gly Gln Gln Leu Leu Ser Cys Gln Pro Phe Ala Phe Ser Asp
 65 70 75 80
 Arg Arg Phe Ala Ser Gly Asn Trp Ser Glu Pro Leu Phe Gly Ser Leu
 85 90 95
 Ala Ala Phe Tyr Leu Leu Asn Ser Gly Phe Leu Leu Lys Leu Leu Glu
 100 105 110
 Leu Leu Pro Ile Asp Glu Gln Lys Pro Arg Gln Arg Leu Arg Tyr Leu
 115 120 125
 Ile Glu Gln Ala Ile Ala Ala Ser Ala Pro Ser Asn Phe Leu Leu Ser
 130 135 140
 Asn Pro Asp Ala Leu Gln Arg Leu Val Glu Thr Gln Gly Ala Ser Leu
 145 150 155 160

2CF9214

Leu Ser Gly Leu Leu His Leu Ala Ser Asp Leu Gln Ala Gly Lys Leu
 165 170 175
 Arg Gln Cys Asp Leu Gly Asp Phe Glu Val Gly Val Asn Leu Ala Thr
 180 185 190
 Thr Pro Gly Ala Val Val Leu Glu Thr Pro Leu Phe Gln Leu Ile Gln
 195 200 205
 Tyr Ser Pro Leu Ser Glu Thr Gln Tyr Gln Arg Pro Ile Phe Met Val
 210 215 220
 Pro Pro Trp Ile Asn Lys Tyr Tyr Ile Leu Asp Leu Gly Pro Glu Asn
 225 230 235 240
 Ser Leu Ile Arg His Leu Leu Glu Arg Gly His Gln Val Phe Leu Met
 245 250 255
 Ser Trp Arg Asn Phe Thr Gln Glu Gln Ala Asp Ile Thr Trp Glu Gln
 260 265 270
 Ile Ile Gln Asp Gly Val Ile Ser Ala Leu Arg Thr Thr Arg Ala Ile
 275 280 285
 Ser Gly Glu Arg His Leu Asn Cys Leu Gly Phe Cys Ile Gly Gly Thr
 290 295 300
 Met Leu Ser Cys Ala Leu Ala Val Leu Ala Ala Arg Gly Asp Gln Asp
 305 310 315 320
 Ile Ala Ser Leu Ser Leu Phe Ala Thr Phe Leu Asp Tyr Leu Asp Thr
 325 330 335
 Gly Pro Ile Ser Val Phe Val Asp Glu Gln Leu Val Ala Tyr Arg Glu
 340 345 350
 Arg Thr Ile Gly Gly His Gly Gly Lys Cys Gly Leu Phe Arg Gly Glu
 355 360 365
 Asp Met Gly Asn Thr Phe Ser Leu Leu Arg Pro Asn Glu Leu Trp Trp
 370 375 380
 Asn Tyr Asn Val Asp Lys Tyr Leu Lys Gly Gln Lys Pro Leu Ala Leu
 385 390 395 400
 Gly Leu Leu Phe Trp Asn Asn Asp Ser Thr Asn Leu Pro Gly Pro Leu
 405 410 415
 Tyr Cys Trp Tyr Leu Arg His Thr Tyr Leu Gln Asn Asp Leu Lys Ser
 420 425 430
 Gly Glu Leu Asp Leu Cys Gly Val Lys Leu Asp Leu Arg Ala Ile Asp
 435 440 445
 Ala Pro Ala Tyr Ile Leu Gly Thr His Asp Asp His Ile Val Pro Trp
 450 455 460
 Arg Ser Ala Tyr Ala Ser Thr Glu Leu Leu Gly Gly Pro Lys Arg Phe
 465 470 475 480
 Val Leu Gly Ala Ser Gly His Ile Ala Gly Val Ile Asn Pro Pro Asp
 485 490 495

2CF9214

Arg	Asn	Lys	Arg	His	Tyr	Trp	Val	Asn	Glu	His	Ile	Ala	Pro	Val	Ala
			500					505					510		
Asp	Asp	Trp	Leu	Gln	Gly	Ala	Gln	Gln	His	Ser	Gly	Ser	Trp	Trp	Gly
		515					520					525			
Asp	Trp	Phe	Ala	Trp	Leu	Thr	Gly	Tyr	Ala	Gly	Pro	Arg	Lys	Pro	Ala
	530					535					540				
Ile	Thr	Met	Leu	Gly	Ser	Ala	Glu	Tyr	Pro	Pro	Leu	Glu	His	Ala	Pro
545					550					555					560
Gly	Arg	Tyr	Val	Lys	Leu										
				565											